

Recovery Plan Action Status

Plan Name: Recovery Plan for Gabbro Soil Plants of the Central Sierra Nevada Foothills

Plan Status: Final

Plan Date: 30-Aug-02

Lead Agency: USFWS

Lead Office: Sacramento Fish And Wildlife Office

(916)
414-8600)

| Species | Action Priority # | Action # | Action Description | Action Status | Est. Initiation Date | Est. Completion Date | Responsible Parties | Work Type | Labor Type | Action Comments |
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| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsi), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 2 | 1.1 | Establish cooperative programs with participants from the public and private sector. | Ongoing Not Current | FY 2000 - FY 2004 | | U.S. Fish and Wildlife Service, California Department of Fish and Game | Other: Information and Education | Contract, Internal Administrative, Internal Technical Assistance | Cost depends on interest and availability of partners. |
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsi), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 1 | 1.2.1 | Develop and implement outreach plans. | Ongoing Not Current | FY 2000 - FY 2004 | | U.S. Fish and Wildlife Service | Other: Information and Education | Contract, Internal Administrative, Internal Technical Assistance | Total costs depend on scope of future outreach needs. In 2000 a \$55,900 section 6 grant to CDFG was used to fund outreach & education. |
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| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsi) | 1 | 2.1.1 | Protect and secure approximately 244 hectares (602 acres) of the Cameron Park preserve for multiple species (North of Highway 50) | Partially Complete | FY 1995 - FY 1999 | | El Dorado County, California, El Dorado Irrigation District, U.S. Bureau of Land Management, U.S. Bureau of Reclamation, U.S. Federal Energy Regulatory Commission, U.S. Fish and Wildlife Service, California Department of Fish and Game, Private landowners | Acquisition: Fee Title | Internal Technical Assistance | 184 hectares (454 acres) acquired from 1997 to June 2002. Cost estimate is for securing and protecting an additional approximate 60 hectares (148 acres). |
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), Stebbins' morning-glory (Calystegia stebbinsi) | 2 | 2.1.2 | Protect and secure approximately 47 hectares (116 acres) of the Cameron Park Preserve for multiple species (South of Highway 50). | Discontinued | | | El Dorado County, California, El Dorado Irrigation District, U.S. Bureau of Land Management, U.S. Bureau of Reclamation, U.S. Federal Energy Regulatory Commission, U.S. Fish and Wildlife Service, California Department of Fish and Game, Private landowners | Acquisition: Fee Title | Contract, Internal Administrative, Internal Technical Assistance | |
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsi) | 1 | 2.1.5 | Protect and secure Salmon Falls/Martel Creek preserve for multiple species (Northern portion). | Partially Complete | Prior to FY 1995 | | El Dorado County, California, El Dorado Irrigation District, U.S. Bureau of Land Management, U.S. Bureau of Reclamation, U.S. Federal Energy Regulatory Commission, U.S. Fish and Wildlife Service, California Department of Fish and Game, Private landowners | Acquisition: Fee Title | Contract, Internal Technical Assistance | About 488 hectares (1,205 acres) in public ownership. Cost is estimate to secure and protect an additional approximate 271 hectares (669 acres) |
| Stebbins' morning-glory (Calystegia stebbinsi), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 1 | 2.2.3 | Protect and secure Grass Valley preserve for Calystegia stebbinsi and decumbent Fremontodendron. | Not Started | | | Nevada County, California, U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Private landowners | Acquisition: Fee Title | Contract, Internal Technical Assistance | Preserved area should include decumbent Fremontodendron, unless it is determine not to be the listed Fremontodendron. Cost will depend on taxonomic findings. |

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| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsi), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 1 | 3.2 | Hire preserve manager for the Pine Hill formation | Complete | FY 2000 - FY 2004 | FY 2006 | El Dorado County, California, U.S. Fish and Wildlife Service | Management: Other | Contract, Internal Technical Assistance | |
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsi), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 1 | 3.3 | Prepare management plans and implement appropriate management in areas inhabited by special status species. | Ongoing Current | Prior to FY 1995 | | American River Conservancy, El Dorado County, California, California Native Plant Society, Nevada County, California, U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Eldorado National Forest, California Department of Fish and Game | Management, Management: Planning | Internal Field Assistance, Internal Technical Assistance | The Pine Hill Preserve Management Plan was completed in July 2008. There are problems implementing Management in Cameron Park. |

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| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsi), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 1 | 3.5 | Perform baseline monitoring at all areas identified for preservation. | Ongoing Current | FY 2006 | | El Dorado County, California, U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Eldorado National Forest, California Department of Fish and Game | Research: Population Surveys | Internal Field Assistance, Internal Technical Assistance, Volunteer | Baseline monitoring will be done during the closest appropriate field season to acquisition of habitat/conservation easement, but it may take 10 years to acquire the habitat. Costs depend on which lands are acquired and need monitoring. |
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsi), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 2 | 3.6 | Develop and implement monitoring plans for special status species populations and habitat in all areas being proposed for preservation. | Unknown | | | U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, California Department of Fish and Game | Management: Planning | Internal Field Assistance, Internal Technical Assistance | Implementation costs depend on land acquisition, survey methods identified in monitoring plan and adaptively updated in response to management. |

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| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsi), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 2 | 4.2.1 | Conduct general surveys | Ongoing Current | FY 2005 | | U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, California Department of Fish and Game | Research: Population Surveys | Contract, Internal Field Assistance, Internal Technical Assistance, Species Expert | These surveys will be conducted as preserves are acquired. Habitat acquisition may take 10 or more years for some sites; costs depend on timing and area acquired. Included in implementation of task 3.6 |
| Stebbins' morning-glory (Calystegia stebbinsi), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 2 | 4.2.2.5 | Survey potential habitat on serpentine and gabbro soils in Nevada County. | Unknown | | | U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, California Department of Fish and Game | Research: Habitat Status, Research: Population Surveys | Contract, Internal Field Assistance, Internal Technical Assistance, Species Expert | For Calystegia stebbinsi and possibly Fremontodendron californicum ssp. decumbens. |
| Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsi), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 2 | 5.1 | Throughout the species' range: Develop plant propagation techniques for listed species and species of concern for which repatriation or introductions would be appropriate. | Partially Complete | FY 2007 | | Rancho Santa Ana Botanic Garden, El Dorado County, California, U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, California Department of Fish and Game | Research: Propagation | Internal Field Assistance, Internal Technical Assistance | Currently not thought to be appropriate for Wyethia reticulata or Senecio layneae |

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| Stebbins' morning-glory (Calystegia stebbinsii) | 2 | 5.11 | Conduct genetic study of Calystegia stebbinsii at Grass Valley. | Not Started | | | U.S. Fish and Wildlife Service, California Department of Fish and Game | Research: Genetics | Contract, Graduate Student, Internal Technical Assistance | |
| Layne's butterweed (Senecio layneae), Stebbins' morning-glory (Calystegia stebbinsii) | 1 | 5.3 | Determine feasibility of habitat restoration. | Planned | FY 2006 | | El Dorado County, California, U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, California Department of Fish and Game, California Department of Forestry and Fire Protection | Research: Management Techniques | Contract, Internal Field Assistance, Internal Technical Assistance | Calystegia stebbinsii; Senecio layneae. Cost and timing dependent on land acquisition, survey results. |
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), Stebbins' morning-glory (Calystegia stebbinsii), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 1 | 5.4 | Conduct necessary demographic studies at the Cameron Park preserve. | Not Started | | | U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, California Department of Fish and Game | Research: Competition, Research: Demographic Studies | Contract, Internal Field Assistance, Internal Technical Assistance | Senecio layneae, Ceanothus roderickii, Galium californicum ssp. sierrae, Wyethia reticulata |
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), Stebbins' morning-glory (Calystegia stebbinsii) | 2 | 5.5 | Conduct necessary genetic and systematic studies at Cameron Park preserve. | Partially Complete | FY 1995 - FY 1999 | | U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, California Department of Fish and Game | Research: Genetics, Research: Taxonomic Studies | Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert | Genetics-Calystegia stebbinsii, Senecio layneae and potentially Ceanothus roderickii; Systematics - Ceanothus roderickii. |
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsii) | 1 | 5.8 | Conduct necessary studies at the Salmon Falls preserve. | Not Started | | | U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, California Department of Fish and Game | Research: Competition, Research: Demographic Studies, Research: General | Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert | Demographics - Calystegia stebbinsii, Galium californicum ssp. sierrae, Ceanothus roderickii, Senecio layneae, Wyethia reticulata Reproduction - Galium californicum ssp. sierrae Fire and disturbance - Senecio layneae |

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| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), Stebbins' morning-glory (Calystegia stebbinsii) | 2 | 5.9 | Conduct necessary genetic, systematic, and pollination biology studies at the Salmon Falls/Martel Creek preserve. | Ongoing Not Current | FY 1995 - FY 1999 | | U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, California Department of Fish and Game | Research: Disease, Research: General, Research: Genetics, Research: Taxonomic Studies | Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert | Genetics-Calystegia stebbinsii, Senecio layneae, and potentially Ceanothus roderickii; Systematics-Ceanothus roderickii Pollination biology-Senecio layneae, Wyethia reticulata |
| Stebbins' morning-glory (Calystegia stebbinsii) | 2 | 6.12 | Collect and store seeds for disjunct populations of Calystegia stebbinsii. | Discontinued | FY 2000 - FY 2004 | | Rancho Santa Ana Botanic Garden, University of California at Berkeley, U.S. Fish and Wildlife Service, California Department of Fish and Game | Research: Other Information, Research: Propagation, Research: Reintroduction | Contract, Internal Field Assistance, Internal Technical Assistance | |
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsii), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 2 | 6.2 | Initiate enhancement, repatriation, or introductions where appropriate. | Ongoing Current | FY 2008 | | U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, California Department of Fish and Game | Management: Other, Management: Reintroduction | Internal Field Assistance | Costs dependent on determined need for action. Lead party will depend on local land ownership. |
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